1158: OUTCOMES FOLLOWING SURGERY FOR COLORECTAL LIVER METASTASES

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Aims: Colorectal cancer is the second commonest cause of cancer related death in the UK. This study aims to assess survival differences across Scotland in patients who underwent surgery for colorectal liver metastases (CRLM).
Methods: Patient data was obtained from a national register of patients undergoing surgical treatment of CRLM in Scotland from April 1990 to April 2011. Resection was categorized into major ($\geq$ 3 segments) and minor (1 – 2 segments). Survival analysis using Cox Proportional Hazards regression was undertaken.
Results: 1266 patients underwent surgical resection: 578 (45.7%) major resection; 688 (54.3%) minor resection. 757(59.8%) were male and 509(40.2%) female. Mean (sd) age for patients undergoing major resection was 59.5 (16.1) and minor resection 53.9 (24.2). Mean (sd) survival was similar with major 45.3 (43.2) months and minor 40.6 (39.5) months. Co-morbidity Hazard ratio 1.12 (95% CI 1.05 – 1.19), $p < 0.001$ and health board of diagnosis ($p = 0.002$) were associated with worse survival (adjusted for age, gender, comorbidity, and deprivation).
Conclusions: Significant regional variation in survival was seen despite correcting for deprivation, age, gender and co-morbidity. Future work should focus on reasons for this disparity and identify means by which outcomes in patients with CRLM can be improved across all regions of Scotland.

http://dx.doi.org/10.1016/j.ijsu.2016.08.061

0265: VARIATION IN THE MANAGEMENT OF DUCTAL CARCINOMA IN SITU: RESULTS OF THE MAMMARY FOLD NATIONAL PRACTICE SURVEY

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Introduction: Ductal carcinoma in situ (DCIS) accounts for approximately 10% of all diagnosed breast cancers and 20% of screen-detected breast cancers in the UK. The latest guidelines were published in 2009. Our survey assesses variation in management of DCIS.
Methods: A national practice questionnaire was developed by the Mammary Fold Academic Committee (MFAC) steering group. The survey focused on pre-operative, operative, and post-operative management. Trainees completed a one-off questionnaire on behalf of their unit.
Results: 76/144 UK breast units (52.8%) participated. 33/76 units perform routine pre-operative ultrasound assessment of the tumour or axilla. There was no clear consensus regarding indications for mastectomy; multifocality and extensive microcalcifications were most frequently cited. 34/76 units offered nipple sparing mastectomy. 33/76 units perform sentinel node biopsy in the presence of a mass lesion and 51/76 at mastectomy. The most widely accepted pathological radial margins were 1 – 2mm. The commonest factors in decision-making for radiotherapy were tumour grade and size. About half of breast units offer long-term follow-up; annual mammograms for five years after surgery were most common.
Discussion: Variation is demonstrated in management of DCIS. MFAC aims to disseminate these results to influence the development of evidence-based guidelines, standardise practice, and improve patient outcomes.

http://dx.doi.org/10.1016/j.ijsu.2016.08.062

0385: TOWARDS A MAGNETIC RESONANCE IMAGING-BASED NOMOGRAM FOR THE PREDICTION OF TRANSPERINEAL PROSTATE BIOPSY OUTCOME

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Aim: The aim of this study was to develop and validate a nomogram for the prediction of transperineal prostate biopsy outcome incorporating magnetic resonance-derived information, including prostate specific antigen (PSA) density (PSAD) and Prostate Imaging Reporting and Data System (PI-RADS) scoring.
Methods: A total of 615 consecutive men who underwent pre-biopsy mp-MRI and transperineal 24 – 40 core, sector-guided prostate biopsies from July-2012 to November-2015 were included.
A multivariate logistic regression model was constructed to predict overall prostate cancer detection, considering age, PSAD, PI-RADS(v1) score and history of previous negative biopsy. Internal validation was performed by calculating the concordance index (c-index) from 200 bootstrap samples.
Results: All variables were significantly associated with prostate cancer on univariate analysis. Significant contributors to the multivariate model were age (OR 1.15), PSAD (OR 3.17 for >0.16ng/ml^2), PI-RADS score (OR 43.12 for score-5) and no previous negative biopsy (OR 2.18). PSA was excluded given high correlation with PSAD ($r = 0.81$).
The nomogram developed from the logistic regression model had good discrimination with a c-index of 87% (95%CI 84 – 90%). C-index improved when examining significant prostate cancer.
Conclusions: An MR-based nomogram is a useful tool for the prediction of prostate biopsy outcome and may contribute to the biopsy decision-making process.

http://dx.doi.org/10.1016/j.ijsu.2016.08.063

ASiT Medical Student Prize

1272: X-PERIENCE – A RADIOGRAPHIC VIEWING PLATFORM DISPLAYING PROFILES OF CADAVERS FOR EDUCATIONAL PURPOSES

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This project presents radiographic profiles of UCD's anatomical donors for educational purposes. An interactive viewing platform *X-perience* was developed to display these images. Comprehensive donor profiles were created by adding medical histories and consultant radiologists' reports. These clinical cases enhance anatomical learning and offer early introduction of radiography.
Full skeletal radiographs were obtained from 13 donors. Radiographic images were produced digitally and labelled. Articulate Storyline2 was used to build *X-perience*, a HTML5 interactive interface. To assess the value of *X-perience* Locomotor Biology students were surveyed. This cohort(n = 50) had prior traditional anatomical teaching and could compare anatomical learning with and without *X-perience.*
The workflow of profiling cadavers and constructing *X-perience* proved successful. *X-perience* is currently used by students during dissection. Results of student acceptability survey, Kirkpatrick Level-1, are extremely positive. Students(84%) agree that *X-perience* is relevant and easy to use. Students(88%) appreciate the clinical relevance that *X-perience* offers. A greater understanding of the importance of radiology is acknowledged(92%).
The introduction of similar platforms in other medical schools is recommended. CT and histology could further refine *X-perience*. In addition to its educational value, *X-perience* strengthens the body donation programme,